

after nucleotide 204 (SEQ ID NO:1). This extends the amino acid sequence by the insertion: GMPGRSWASKRVS (SEQ ID NO:33).

The sequence listing on pages 48 to 80 of the specification has been substituted by replacement pages 48-82 attached hereto as separate pages.

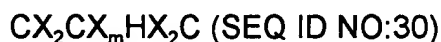
IN THE CLAIMS

Claims 1-3 have been amended to read as follows:

1. (amended) A poly(ADP-ribose) polymerase (PARP) homolog which has an amino acid sequence which has

a) a functional NAD⁺ binding domain
and

b) no zinc finger sequence motif of the general formula



in which

m is an integral value from 28 or 30, and the X radicals are, independently of one another, any amino acid;

and the functional equivalents thereof.

2. (amended) A PARP homolog as claimed in claim 1, wherein the functional NAD⁺ binding domain comprises one of the following general sequence motifs:

PX_n(S/T)GX₃GKGIYFA (SEQ ID NO:11),

(S/T)XGLR(I/V)XPX_n(S/T)GX₃GKGIYFA (SEQ ID NO:12) or

LLWHG(S/T)X₇IL(S/T)XGLR(I/V)XPX_n(S/T)GX₃GKGIYFAX₃SKSAXY (SEQ ID NO:13)

in which

n is an integral value from 1 to 5, and the X radicals are, independently of one another, any amino acid.

3. (amended) A PARP homolog as claimed in claim 1, comprising at least